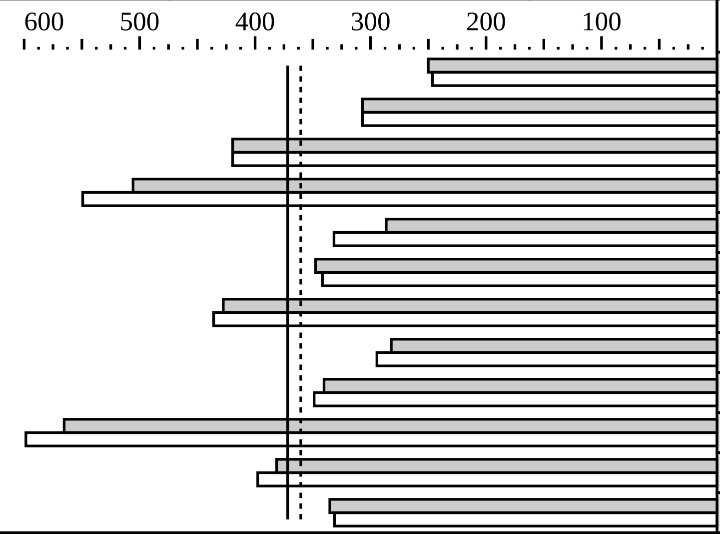
CINT2000 Result

Bull
Escala PL1650R+ (2200 MHz, 16 CPU)

SPECint_rate2000 = 372
SPECint_rate_base2000 = 360

SPEC license #: 20	Tested by: Bull	Test date: Feb-2007	Hardware Avail: Feb-2006	Software Avail: Dec-2006



Benchmark	Base Copies	Base Runtime	Base Ratio	Copies	Runtime	Ratio
164.gzip	32	208	250	32	211	246
175.vpr	32	169	307	32	169	307
176.gcc	32	97.4	419	32	97.4	419
181.mcf	32	132	506	16	60.8	549
186.crafty	32	130	286	32	112	332
197.parser	32	192	348	32	196	342
252.eon	32	113	428	32	111	436
253.perlbmk	32	237	282	32	227	295
254.gap	32	120	340	32	117	349
255.vortex	32	125	565	32	118	599
256.bzip2	32	146	381	32	140	398
300.twolf	32	332	335	32	336	331

Hardware

CPU:	POWER5+
CPU MHz:	2200
FPU:	Integrated
CPU(s) enabled:	16 cores, 8 chips, 2 cores/chip (SMT on)
CPU(s) orderable:	2, 4, 6, 8 chips
Parallel:	no
Primary Cache:	64KBI+32KBD (on chip)per core
Secondary Cache:	1920KB unified (on chip) per chip
L3 Cache:	36MB unified off chip per chip
Other Cache:	None
Memory:	128 GB (32x4 GB)
Disk Subsystem:	1x73GB SCSI, 15K RPM
Other Hardware:	None

Software

Operating System:	AIX 5L V5.3
Compiler:	XL C/C++ Enterprise Edition Version 8.0 for AIX with the December 2006 PTF XL Fortran Enterprise Edition Version 10.1 for AIX with the November 2006 PTF
File System:	AIX/JFS2
System State:	Multi-user

Notes/Tuning Information

```
Portability Flags:
  176.gcc:      -ma -DHOST_WORDS_BIG_ENDIAN
  186.crafty:   -DAIX
  253.perlbmk:  -DSPEC_CPU2000_AIX
  254.gap:      -DSYS_IS_BSD -DSYS_STRING_H
                -DSYS_HAS_MALLOC_PROTO -DSYS_HAS_CALLOC_PROTO
  300.twolf:    -DHAVE_SIGNED_CHAR

Base Optimization Flags:
  C:     -qpdf1/pdf2
         -O5 -blpdata -D_ILS_MACROS
  C++:   -qpdf1/pdf2
         -O4 -qalign=natural

Peak Optimization Flags
  164.gzip:     -qpdf1/pdf2
                -O4 -qfdpr -blpdata
                fdpr -q -O3
  175.vpr:      -qpdf1/pdf2
                -O5 -qfdpr -blpdata
```

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Notes/Tuning Information (Continued)

```
                     fdpr -q -O3
   176.gcc:          -qpdf1/pdf2
                     -O4 -qarch=pwr4 -qtune=pwr4 -qalign=natural -blpdata
   181.mcf:          users=16
                     -qpdf1/pdf2
                     -O5 -blpdata -qalign=natural -qhot=arraypad -qfdpr -Q -qmaxmem=-1
                     fdpr -q -O3
   186.crafty:       -qpdf1/pdf2
                     -O4 -qalign=natural -q64 -lhmu -blpdata
   197.parser:       -qpdf1/pdf2
                     -O4 -qfdpr -D_ILS_MACROS -blpdata
                     fdpr -q -O3
   252.eon:          -qpdf1/pdf2
                     -O4 -qalign=natural
   253.perlbmk:      -qpdf1/pdf2
                     -O4 -qarch=pwr4 -qtune=pwr4 -qalign=natural -blpdata -lhmu
   254.gap:          -qpdf1/pdf2
                     -O4 -qarch=pwr4 -qtune=pwr4 -qalign=natural -blpdata
   255.vortex:       -qpdf1/pdf2
                     -O4 -qfdpr -lhmu -blpdata
                     fdpr -q -O3
   256.bzip2:        -qpdf1/pdf2
                     -O5 -qfdpr -blpdata
                     fdpr -q -O3
   300.twolf:        -O5 -qfdpr -blpdata
                     fdpr -q -O3
```

The installed OS level is AIX 5L for POWER version 5.3 with the 5300-04 Recommended Maintenence package.

```
 SMT:  Acronym for "Simultaneous Multi-Threading". A processor technology that allows
       the simultaneous execution of multiple thread contexts within a single processor
       core. (Enabled by default)
 DCM:  Acronym for "Dual-Chip Module" (one dual-core processor chip + one L3-cache chip)
 SUT:  Acronym for "System Under Test"

 Extended C:     IBM XL C for AIX invoked as cc
 ANSI C89:       IBM XL C for AIX invoked as xlc
 C++:            IBM XL C for AIX invoked as xlC
 Fortran 77:     IBM XL Fortran for AIX invoked as xlf90 unless explicitly reassigned
 Fortran 90:     IBM XL Fortran for AIX invoked as xlf

 ulimits set to unlimited.
 Large page mode was set as follows:
     vmo -r -o lgpg_regions=3200 -o lgpg_size=16777216
     bosboot -aD
     shutdown -rF

 The following config-file entry was used to assign each benchmark process to a core:
 submit = let "MYCPU=2*$SPECUSERNUM"; if (("$MYCPU > 31"))
then let "MYCPU-=31"; fi; bindprocessor $$ $MYCPU; $command
 The "bindprocessor" AIX command binds a process to a CPU core.
```